

To: Dew, Wendy[Dew.Wendy@epa.gov]
From: Williams, Caroline
Sent: Mon 8/17/2015 5:00:50 PM
Subject: FW: CO Mine Clips - 8/17

From: Ludwigsen, Emily
Sent: Monday, August 17, 2015 10:10 AM
Subject: CO Mine Clips - 8/17

Associated Press, Denver Post (4), Discovery News, The Guardian, Huffington Post, New York Times, Reuters, The Wall Street Journal

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Associated Press (via Durango Herald)

<http://www.durangoherald.com/article/20150816/NEWS02/150819715/San-Juan-River-cleared-for-drinking-water->

San Juan River cleared for drinking water
Associated Press
August 16, 9:58PM

FARMINGTON – Communities in northern New Mexico that use the Animas and San Juan rivers for drinking water can resume doing so after officials lifted water restrictions enacted after a leak of contaminants at a Colorado gold mine sent a plume of pollutants downstream.

Utah also has given its approval for its San Juan River water to be used for crop irrigation and livestock, and Colorado has reopened the Animas River to boating.

Officials in New Mexico lifted the ban on San Juan County using the San Juan and Animas rivers for drinking water. The rivers also can be used for recreation.

New Mexico lifted the ban after officials say test results from both rivers show the water there meets environmental-quality standards. Still, they urged people to avoid contact with discoloration in sediment or river water.

Officials in New Mexico also urged people not to eat fish caught in the rivers until the state can determine the level of contamination in fish.

Utah's agriculture department has lifted advisories against using the water, saying most of the contamination from the spill flowed through days earlier.

A Utah State University veterinary toxicologist says the highest levels of remaining contamination carried short-term and minimal exposure risks but posed no harm to animals, plants and soil.

Federal officials have said concentrations of metals, including lead, thallium, silver and antimony, have increased in Colorado's Animas River since the spill Aug. 5 from the inactive mine near Silverton. But they say initial tests on sediments show no risk to people using the river.

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Denver Post

http://www.denverpost.com/news/ci_28644587/spill-makes-silverton-even-warier-epa

Animas River spill makes Silverton even warier of EPA

Jesse Paul

August 16, 2AM

SILVERTON — For years, three letters have made people in this old mining town particularly suspicious: EPA.

But when the Environmental Protection Agency released 3 million gallons of wastewater from a nearby historic mine Aug. 5, that suspicion grew into a simmering anger for many of Silverton's 650 year-round residents.

"How stupid for them to dig around up there and cause a natural disaster," said Connie Taylor, who grew up watching her father work in the surrounding mines. "I don't even know how to put it into words," she added of her reaction to the Gold King Mine release.

In the massive spill's wake, there has been renewed debate in this sleepy town north of Durango about whether Silverton and its surrounding polluted creeks that flow into the Animas River should be designated as a Superfund site. In the spring of 2014, an EPA regional administrator said that without the listing, funds for long-term remediation would be scarce.

Locals, who decades ago traded their mining equipment for funnel cakes and souvenirs in an economy that now relies almost solely on tourism, are worried such a label could threaten their livelihood and keep away visitors. Some who see the EPA as an attack on their heritage even hope that mining, which began in the late 1800s, will someday return.

"There's lots of gold and silver left in these mountains," said Gary Miller, who once worked in a Silverton mine.

Miller thinks the EPA should stop meddling in the old abandoned portals that surround the city, calling the acidic heavy metals that leech from the mines "natural."

"Silverton has struggled for 20-some years now," he said, referencing when the last area mine

closed.

Superfund sites are on the national priority list for hazardous waste cleanup. In Silverton, those in favor of such a designation hope it would mean a water treatment plant to clean the contaminated fluid flowing down from the mines above.

The Animas River watershed has been identified as one of the most polluted by mine waste in the state. The EPA, in a January report, said one mine was in need of "time-critical removal action."

Many downstream in Durango, who were horrified when the Animas turned orange after the spill, are calling for Silverton to become a Superfund site in the disaster's wake. Members of Colorado's and New Mexico's congressional delegations, in a letter to President Obama this week, asked to explore the idea of a water treatment plant in the Upper Animas River.

Silverton Standard and the Miner editor Mark Esper, who supports Superfund designation, said those in town who disapprove of the EPA are using the Gold King calamity to confirm their position.

In March, he said, the town council expressed shock and pushed back when the EPA said it wanted to test soil over concerns of contamination from an old smelter. The town's council still hasn't decided if it will let the EPA do the testing.

"There is a generational thing," Esper said about who approves of the EPA and who does not.

Signs of Silverton's digging heritage — and the damage therein — are omnipresent.

The contaminated orange waters of Cement Creek and the Christ of the Mines shrine, which looks down upon its streets, serve as reminders of what once was.

A theory has been making its way around town that the EPA purposefully caused the Gold King spill to force Superfund on Silverton.

As he rung up customers at his souvenir store, San Juan County Commissioner Scott Fetchenhier said Thursday tourism is the town's livelihood. Silverton, which just got wired Internet within the past year, is the only town in Fetchenhier's county.

He declined to say if he opposes a Superfund label but expressed a preference for a stakeholders-based approach to cleaning up festering area mines.

"I have very strong feelings about it," he said over the sound of his cash register.

Bill Dvorak, who works for the National Wildlife Federation, said politics could play a major role in deciding whether the town becomes a Superfund site.

With all of the media attention surrounding the Animas spill, he says, that could boost the town's profile.

But such a designation may not mean immediate aid, his colleague, Ty Churchwell, of conservation group Trout Unlimited, says.

"People think this is designated Superfund, the next day trucks and guys in hazmat suits are going to be in town," Churchwell said, explaining how his organization does not have a position on whether or not the status is granted. "That's not how it works."

For at least one old miner in Silverton who worked in the expansive Sunnyside Mine, which has become a major cleanup focus, having some federal help wouldn't be such a bad thing.

"I think a lot of us realize it's inevitable," Dennis Kurtz said of Superfund designation. "When you start thinking about the people downstream, you have to stop looking at your own little tree. You have to be looking at the forest."

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Denver Post

http://www.denverpost.com/politics/ci_28647823/animas-river-spills-political-fallout-defies-expectations

Animas River spill's political fallout defies expectations

John Frank and Joey Bunch

August 17, 2AM ET

In a Donald Trump-esque political moment, Colorado Gov. John Hickenlooper defied all convention, all health and environmental fears about the Animas River, and took a drink of its water five days after 3 million gallons of pollution turned it orange.

The stunt came in response to a dare from the local media and Hickenlooper's desire to show that the river is no longer a health hazard and that Durango, the southwestern Colorado city that considers the river its lifeblood, is open for business.

But the viral images of Hickenlooper drinking the water — which he first treated with iodine to kill bacteria and pathogens — also showcase the unusual political currents that flowed from the Aug. 5 wastewater spill triggered by the Environmental Protection Agency.

And how the EPA handles the spill is likely to affect its fragile reputation in Colorado, where local officials and businesses complain about a broader assault from the federal government on the Western way of life.

Hickenlooper, a Democrat, put himself at odds with the Obama administration from the start as he blasted the agency's slow response and, from the banks of the river, eschewed the normal course in disasters.

Instead of highlighting the damage to provoke quicker action from federal authorities, the governor forcefully dismissed cautions about water quality in a public argument with the region's EPA administrator.

"The point I was trying to make is that the river is back to normal," Hickenlooper said in an interview after returning from Durango. "There's a silver lining in all this. It doesn't appear there is going to be lasting environmental damage or significant environmental damage, and what most of us were fearful of didn't happen."

But local leaders took a more measured approach in the days after the spill, emphasizing concerns about the long-term damage to the river, where heavy metals and toxins may lie in the river bottom sediment.

State Senate President pro tem Ellen Roberts, a Durango Republican, suggested the governor's big sip from the river sent the wrong message.

"I wouldn't have done that," she said. "It was a bit of a head-scratching move. I believe it was well-intentioned, but I think, frankly, we have too many public health and safety concerns right now."

Dan Olson, the executive director of the Durango-based San Juan Citizens Alliance environmental group, said he hopes the environmental damage isn't so easily dismissed.

"This event made visual — dramatically — the pollution we live with so people could not ignore it," he said. "But you already see, as the water column clears, how people are rushing back to their positions, their hope or belief that everything is good here, nothing to see, let's move along."

Responding to questions about the possible long-term effects, Hickenlooper said heavy metals on the river bottom are "normal sediment" and state scientists showed him "really good evidence that the river came back to its natural state — well, not its natural state, to its normal state."

"Look, I'm a geologist, right? I recognize that you have to test everything and retest it and get redundant experiments," said Hickenlooper, who once drank fracking fluid to make a point. "But the science that we have so far suggests that we don't have the natural calamity ... that so many of us were fearful of when we first saw those pictures."

For a governor, said Bob Loevy, professor emeritus of political science at Colorado College, a disaster is a legacy-defining moment, and Hickenlooper's reputation may depend on what scientists find in coming days and months.

"I think he has a political liability if he doesn't show he was right and show the state has taken a role in ensuring the river gets cleaned up," Loevy said. "How long this is a political liability for him depends on how bad the damage really turns out to be and how long it takes to clean it up."

Floyd Ciruli, a Denver-based pollster and political consultant, said the coloring of the river was so dramatic "that I think people are going to be naturally concerned about the long-term residual impact."

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Denver Post

http://www.denverpost.com/news/ci_28651849/navajo-nation-angry-at-epa

Animas River spill: Navajo Nation angry at EPA
Jesse Paul

August 17, 2AM ET

CUDEI, N.M. — Outside the tribal chapter here near the San Juan River, Navajo Nation President Russell Begaye pointed to a stack of hay delivered by the Environmental Protection Agency and expressed disappointment.

"This was supposed to be here seven days ago," he said Friday, about 30 miles south of the Colorado border. "This should have been here last week."

If there was ever doubt this tribe of roughly 300,000 people is mistrustful of the federal government, such uncertainty is gone. The EPA-caused 3 million-gallon mine wastewater spill in southwest Colorado on Aug. 5 sent resentment cascading into American Indian land along with a plume of heavy-metal contaminants.

Members of the tribe, which spans 27,600 square miles across three states, anxiously waited and watched as yellow-orange sludge streamed into their sacred San Juan River four days after the spill. Navajo Nation leadership has even coined a Navajo phrase for their response — and frustration — to the disaster, calling it Tó Łitso — Operation Yellow Water.

The calamity has sent a wide swath of the tribe, already suffering from serious economic depression, into further disarray. In Navajo country, where the land has long sought to quench its drought, people fear the Gold King Mine disaster near Silverton will have impacts for decades.

"They endangered our people," Begaye said of the EPA.

The San Juan River remains closed in the Navajo Nation, and officials have warned farmers and ranchers against using its waters for crops or livestock. Irrigation wells are bone dry, and much of the tribal yield is either dying off or already dead.

Roy Etcitty stood Saturday before his ruined crops in Shiprock, N.M., and explained how the disaster is another example of why "us Indians don't trust the government." He hasn't watered his fields since officials closed the San Juan, and his horses have been blocked from drinking its

waters.

He said the calamity is just another in a long line of American Indian oppression.

"The U.S. government isn't going to come through," Etcitty said. "They never come through."

In the days since the spill, Begaye has been among the most vocal in a growing chorus of politicians across the Southwest who have chastised the EPA for causing the disaster and its subsequent response.

He drove nearly 225 miles from his office in Window Rock, Ariz., to see the Gold King Mine first-hand and then posted a video on Facebook explaining in both Navajo and English what was happening at the site.

Begaye said he wants the EPA to remove all contaminated sediment from the San Juan River and expects the agency to pay for his tribe's hardships and expansive emergency response. He met last week with EPA leader Gina McCarthy when she visited Durango and Farmington, N.M., to talk with responders and survey the damage.

"We wanted some solid commitments," Begaye said of the meeting, "but we didn't get that."

The San Juan River flows for 215 miles through Navajo land, making it, by mileage, the most impacted of any contiguous community. Members of the tribe say the spill has left them facing financial ruin, spiritually broken and, through and through, angry.

Officials in the Navajo Nation have told members not to agree to any settlement claims from the EPA, which in the days after the spill released a form streamlining payouts to those impacted.

The tribe's attorney general, Ethel Branch, said last week she feels the language is misleading and could bar future damage reimbursements in the years to come.

Branch has solicited an opinion from U.S. Attorney General Loretta Lynch and the Department of Justice on the claim form's legality and language. The EPA has repeatedly said it is not trying to bar future payouts.

Branch said she plans to sue the EPA, explaining how legal action has been "the solid message from the Navajo Nation." An emergency has been declared, and tribal officials are petitioning for help from the Federal Emergency Management Agency.

"The long-term effects, we just don't know right now," Jonathan Nez, the tribe's vice president, said Friday as he traveled in a motorcade during a tour of impacted areas.

Nez says the EPA's spill has reminded the Navajo people of previous contention with the federal government, particularly the cleanup of uranium pollution on their land.

"Over the years, we have never really received straight answers," he said.

Steve Calanog, an EPA on-scene coordinator based in California, stressed that the agency is doing its best to mend and maintain its relationship with the Navajo Nation. Federal workers are delivering 100,000 gallons of water for agriculture to the tribe each day, the EPA says, and daily samples are being drawn at 11 San Juan River sites on tribal land to check contaminant levels.

"We have been working with the Navajo Nation for many, many years," he said Friday during a media conference call. "We continue to work together through very difficult situations. We will get through this and continue to have an open and candid dialogue with them."

The conversations on the reservation, however, suggest healing the still-open wounds of the Gold King disaster won't be so easy.

At the Begaye Flea Market in Shiprock on Saturday morning, shoppers and vendors expressed their disgust for the EPA and hope the agency will be more cautious in the future.

"I'm not sure you really want to know what I think of the EPA," Keith Dempsey said as he manned a booth at the market. "I don't think people really understand the ramifications of what happened."

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Denver Post

http://www.denverpost.com/environment/ci_28647978/colorado-faces-230-mines-leaking-heavy-metals-into

230 Colorado mines are leaking heavy metals into state rivers

Bruce Finley

August 17, 2AM ET

After the 3 million gallon Gold King Mine blowout, Colorado officials began scrambling to create a map of a problem they've known about for years: 230 other old mines statewide leaking heavy metals-laced muck into headwaters of the nation's rivers.

These old mines have leaked so much for so long, thousands of gallons a minute, that state agencies don't track the combined toxic flow. But by the estimates at sites where the Environmental Protection Agency has stepped in, the overall discharge equals at least one Gold King disaster every two days — spreading cadmium, copper, lead, arsenic, manganese, zinc and other contaminants.

"We're not OK with any of this. We're not OK with contaminated water running into waterways," said Ginny Brannon, director of reclamation, mining and safety for the state.

"It is beyond our control. We inherited what we inherited. We took that, all those sites, and every year we steadily move forward with the goal of cleaning it up. We do as much as we can every year. We would love to do more. If we had the money."

The EPA has calculated that 40 percent of river headwaters in the West are impaired by acid mine drainage. In Colorado, state health officials Thursday determined that discharges from the 230 old mines have contaminated 1,645 miles of rivers and streams.

But there is no state or federal program for systematically inspecting those mines, tucked away in high mountains, the hangover from mining booms and busts that made Colorado a state.

Colorado mining regulators say that's because culprits at most sites have vanished.

The waterways contaminated by old mines — concentrated around historic mining hubs Silverton, Leadville, Lake City, Salida, Montezuma, Central City and Ouray — include segments of the Arkansas, Animas, Eagle, Big Thompson, Gunnison, South Platte and Uncompahgre rivers.

First impacts of water contaminated with heavy metals generally show up as dead fish or aquatic life, with drinking water supplies threatened. Later damage, depending on exposure, include human health harm and higher costs of cleaning up water at municipal treatment plants. Fully restoring poisoned fisheries after past disasters in Colorado has taken decades.

State mining regulators often don't discover the old mine discharges until state health responders are called to test water after residents report bright colors or dead fish.

While state mining officials have visited all 230 sites, Bruce Stover, director of abandoned mine lands reclamation, emphasized limits on what Colorado can do to launch cleanups. Liability risks and weak laws are to blame, he said.

"These are inactive sites that do not have a permit. There are no inspections on them whatsoever. They are just out there in the woods," he said.

Short of EPA takeover for federally run cleanups, which include installation of continual water-treatment systems, state officials said the best Colorado can do is to try to move forward on a few cooperative projects each year.

They have to rely on funds funneled from outside federal and private sources. Unlike coal mining and extraction of oil and gas, hard-rocking mining in the West, under the 1872 mining law that still governs, companies are not required to pay royalties or other fees that could help deal with festering abandoned mines.

Last year, state mining officials spent \$1.5 million on six mine cleanup projects, which includes tailings removal, riverside restoration and plugging leaks, down from \$4.5 million in 2013 — reflecting what federal agencies, such as the Bureau of Land Management and the Forest Service, have been able to contribute.

State mining officials spent \$12.3 million on mine-reclamation work between 2009 and 2014.

Stover noted that most of the 230 old mines still leaking, while they cause harm, probably would not individually meet EPA criteria for launching a Superfund cleanup.

When Colorado has to go it alone, officials typically face legal and technical controversy. State mining engineers have favored installation of bulkhead plugs inside mines — a way to stop toxic discharge.

But that approach appears questionable after the Aug. 5 Gold King blowout, triggered by an EPA crew. Bulkheads backed up water inside Gold King and nearby mines, possibly priming them for blowouts.

Gold King owner Todd Hennis last week said the spread of backed-up water in the nearby Sunnyside Mine was a factor in the blowout.

EPA records on the adjacent Red and Bonita Mine show that state-backed installation of bulkheads in the Sunnyside Mine led to loaded-up wastewater in the Mogul, Red and Bonita, and Gold King mines, worsening contamination of Animas headwaters.

The Animas River Stakeholders Group is calling for installation of a water-treatment plant on Cement Creek, the hardest-hit Animas tributary — at an estimated cost of \$5 million to \$20 million, plus \$1.2 million a year to run the plant.

"The ultimate goal should be to change the 1872 mining law," said Bill Dvorak of the National Wildlife Federation. "It should be changed to say those who caused the problem should have to deal with it and not walk away from it and leave it to the taxpayer."

Colorado Mining Association president Stuart Sanderson said Colorado and federal agencies could benefit from industry expertise in cleaning up old mines.

"The industry is and has been willing to contribute more resources and expertise to clean up historic mines that are not subject to modern reclamation standards," Sanderson said. But first, he said, Congress must take action — to shield companies that get involved, he said.

"We need good Samaritan legislation and some assurance our liability is not unlimited."

Meanwhile, the discharge from the 230 mines continues.

Colorado officials blame a complex mix of factors for why this problem has festered for more than five decades.

They cite a general lack of political will, leading to poor funding. The entire \$8 million budget for Colorado's 65-employee mining division, which focuses mostly on active mining, is less than the amount needed for a single major cleanup.

At the federal level, a U.S. Geological Survey abandoned-mines program was canceled in 2008 amid budget cuts.

State officials also point to the difficulty of cleanup, which means mobilizing work teams at sites above timberline where rock, debris and collapsed timbers block tunnels.

And they lament a legal liability nightmare. Under federal law, anybody who embarks on mine cleanup and who, no matter how well-intentioned, makes the problem worse, can face federal prosecution for tens of millions of dollars for environmental damages.

Conservation groups such as the National Wildlife Federation and Trout Unlimited, despite significant funding from hunters and anglers, say this cripples their ability to get involved.

"We need some national policy change for groups like ours to be able to get out there and work on old mines," said Steve Krandall, Trout Unlimited's Durango-based director of conservation in the western United States. "There could be a much more robust public-private partnership around this issue."

Colorado does its best with limited resources, Krandall said.

"But this is such a large and pervasive issue. The EPA can only get to and remediate so many mines," he said. "The potential for this kind of accident certainly exists around the West. ... Why do we accept it?"

Former Sen. Mark Udall repeatedly pushed for good Samaritan laws in Congress. Those efforts failed.

Gov. John Hickenlooper said a blowout like the one at Gold King must never happen again. Colorado officials again are calling on Congress to act.

"We'd love to see a good Samaritan law that allows third parties to go in and help work on these sites without liability," Brannon said. "Maybe there's enough attention now that perhaps, finally, we can get that through Congress. If we had good Samaritan laws, we could do more good cleanups."

Below Gold King, as Cement Creek flows into the Animas, heavy-metal contamination got so bad that, a couple of years ago, the EPA conducted a test. Biologists were worried that birds eating aquatic insects could be exposed to high zinc, cadmium, lead, copper and manganese. Fish had long since died.

An EPA team collected water a mile down from where Cement Creek meets the Animas and, in a lab, dropped in a batch of young trout. They left them for 96 hours, according to an EPA document. All the fish died.

That helped spur the recent EPA intervention at Gold King and other mines near Silverton, leading to this month's spill.

Even late last week, with a 100-mile mustard-hued plume barely cleared, state and local officials largely agreed that a greater EPA role in the future is probably essential to deal with those 230 leaking mines.

"You're going to have some people say: 'Hey, the EPA, look at how incompetent they are.' But others will see this is part of a longer-term problem," said Peter Butler, a coordinator of the Animas stakeholders group and a former director of Colorado's Water Quality Control Commission. "Mistakes happened. We need to have this agency come in and provide more

resources.

"There's just a shortage of state resources."

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Discovery News

<http://news.discovery.com/earth/toxic-spill-in-animas-river-spawns-conspiracies-150815.htm>

Toxic Spill in Animas River Spawns Conspiracies

Benjamin Radford

August 15, 10AM ET

Earlier this month contractors working for the U.S. Environmental Protection Agency (EPA) accidentally released about 3 million gallons of toxic mine waste into Colorado's Animas River. The stew of toxic elements turned the river orange and caused great concern for wildlife, farmers, tourism and those who depend on the river for drinking water.

Tests conducted earlier this week are showing that levels of lead, arsenic, mercury and other toxic elements in the river are returning to safe levels. It's important to note that, especially in rural areas, drinking water from wells contains naturally-occurring levels of these elements. However many are concerned that, though the water itself may not be hazardous, the river's sediments may be toxic and remain so for years to come.

Accidents and disasters — especially life-threatening ones, though the Animas spill is not known to have harmed anyone yet — often spawn conspiracy theories. The most popular theory claims that the EPA purposely polluted the river as a way to obtain extra funding available for cleanup. Under this classic “follow the money” scenario the EPA decided the best way to get free up money for Superfund sites — as this could potentially be designated — was to create a disaster.

One typical conspiracy commenter opined, “I am thinking there were multiple reasons for something like this — funding, but also Agenda21 — re-wilding of the west — they want most all of the US to be “NO HUMANS ALLOWED” ... plus if people get sick/die from the heavy

metals in the process, it's the sacrifice that must be made (from their perspective).”

If this conspiracy is true, EPA administrator Gina McCarthy has made an incredible sacrifice of her agency's credibility — and potentially her own career — to secure extra government money for her agency. This is akin to claiming that police are committing crimes in order to inflate the crime rate and justify bigger budgets.

As evidence of this conspiracy, proponents point to a Letter to the Editor published shortly before the spill in a regional Colorado newspaper written by a retired geologist which seems to predict that the EPA is up to something nefarious.

Ironically the letter actually contradicts key claims made by the conspiracy theorists who promote it. It does not predict an intentional spill of mine water into the Animas (or any other) river by the EPA but instead that well-meaning efforts at preventing seepage of mine waste might result in water being backed up and releasing on its own.

Furthermore a careful reading of the letter clearly states that the EPA's hidden agenda is not — as the conspiracy theorists claim — gaining access to Superfund money through creating a natural disaster but instead “construction of a treatment plant” for treating existing mine waste. In fact the writer explicitly states that “with a budget of \$8.2 billion and 17,000 employees, the EPA needs new, big projects to justify their existence.”

In other words according to the geologist, the EPA's struggle is not getting more money but using the money it has.

Conspiracy Theories

It may seem odd that an obvious environmental accident would prompt conspiracies, but there are several reasons for this. In the world of conspiracies, as the saying goes, “there are no accidents.”

Princess Diana's death from a car "accident," for example, was in fact a cleverly disguised assassination by the British intelligence agencies — or those upset at her romance with an Arab man, or any number of others who supposedly wanted Diana dead. Even hurricanes, wildfires, tsunamis, and other obviously natural disasters are suspected of being part of a dark conspiracy, including the 2010 Haiti earthquake.

Another element is the paradoxical assumptions that conspiracy theorists make regarding government competence: On one hand they believe that no one would be stupid or careless enough to "accidentally" trigger a breach in a retaining lake of mine waste with heavy equipment, but on the other hand they claim that the government sloppily leaves clues about what they're up to — for those clever enough to find them (such as those who misread the Letter to the Editor mentioned above).

And, of course, conspiracy theories abound on the subject of health, with many convinced that doctors and Big Pharma are colluding to keep cancer cures off the market and push disease-causing vaccines on the public for the sake of profits.

Rumors, whether true, are popular in part because they serve a social purpose. In their book "The Global Grapevine: Why Rumors of Terrorism, Immigration, and Trade Matter" (Oxford University Press, 2010), folklorists Gary Alan Fine and Bill Ellis note that "Rumor fills several important roles for societies, and unraveling their meaning allows us to reveal social concerns."

Many people across the political spectrum endorse some version of conspiracy theory. In their book "American Conspiracy Theories," Joseph Uscinski and Joseph Parent, both Associate Professors at the University of Miami, note that latent conspiracy thinking among the public only becomes "widely activated in a context where the belief helps a group balance against threats."

Conspiracy theories are weapons of the weak to recover from losses, improve (social) cohesion, and coordinate resistance." In other words, the conspiracy theories surrounding the Animas river allow people to vent their — perhaps legitimate — frustrations and distrust of the government — whether they really think the spill was intentional or not.

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The Guardian

<http://www.theguardian.com/environment/2015/aug/17/animas-river-mine-spill-experts-next-disaster>

After Animas river spill, experts warn of next disaster: 'We were lucky this time'

Jessica Glenza

August 17, 7:50AM EDT

The mustard-tinged cloud of toxic wastewater that last week colored Colorado's Animas river an unappealing tangerine was not the first spill to dye the river – nor is it likely to be the last, according to engineers, if government and private industry fail to take action as they have in the past.

One expert called the mines north of Durango near Silverton and the abandoned mining town of Gladstone “ticking time bombs”. Another expressed relief that the Gold King spill was not larger – if a slurry of mine waste known as tailings had spilled from the area, he said, there could have been “100 times the volume” of waste.

Mark Gibson, the principal engineer at the environmental regulatory consulting company Kyklos Engineering in Denver, said the industry has expected a big blow-out like this for years.

“Most of us in the industry have been predicting this for 30 years,” said Gibson. “It’s basic physics. Where is the water going to go?”

The Gold King mine burst open 5 August when the US Environmental Protection Agency (EPA) was investigating ways to insert a drainage pipe into the mine, part of a larger project to clean up the nearby Red and Bonita mine. Somehow, the EPA burst the dam made of old timbers and soil, sending three million gallons of wastewater into Cement Creek.

That sent fluorescent yellow water with the acidity of coffee cascading into the dead creek, and then into the Animas, where it passed through the heart of Durango.

The color, obvious pollution, and lack of information about impact left residents, who rely on the river for drinking water, crop irrigation, livestock watering and tourism, reeling.

Acid mine drainage, as the yellow water that flowed into the Animas is known, is the result of water flowing through the mine tunnel. The chemical reaction between metals such as pyrite, oxygen and water lower the water's pH, forming a kind of sulfuric acid.

What makes this kind of waste particularly nasty is how mineral deposits in the mines react with it – heavy metals such as cadmium, lead and arsenic dissolve in acidic water, making it a doubly noxious cocktail of acid and dangerous metal.

It's this sort of waste that some experts, and Gold King's owner, claim could be filling the swiss-cheese network of mining tunnels that have carved mountains in and around Silverton, presenting the possibility of a larger spill in the future.

'Disaster was going to occur'

Animas river spill

Heavy metals discolor the water near Baker's Bridge north of Durango, Colorado. Photograph: Jeremy Wade Shockley for the Guardian

At Gold King, it's hardly the first warning that the mine could have a "blow-out".

"We were lucky this time," said Gold King mine owner Todd Hennis, who believes that a large pool of water behind his mine will continue to discharge, potentially in an even larger blow-out. "I have been telling people quite vocally for 14 years: the Sunnyside mine pool would only get worse, more adjoining properties would see discharges from their lands, and that at some point a disaster was going to occur."

Hennis blames the concrete plugs or "bulkheads" installed by neighboring mine owner Sunnyside Gold Corporation, a subsidiary of \$3.8bn Canadian mining conglomerate Kinross

Gold.

Sunnyside Gold Corporation operated a water treatment plant on the site for years, purifying acid mine drainage from the nearby American Tunnel. But the mine operator and the state reached an agreement with Colorado in 1994 to remediate several other mine sites, and hand over operation of the water treatment plant to Gold King's then-owners, freeing Sunnyside's owners from perpetual operation of the water treatment plant, according to reporting from a senior editor at High Country News.

Soon after, Gold King's owners found themselves in financial trouble and the water treatment plant closed. Sunnyside's owners installed money-saving 12ft-thick concrete plugs at the mine, which have stopped up the water in mines near Silverton. At this point, Hennis said output at his mine began to increase from seven gallons per minute before the bulkheads to 250 gallons per minute by 2012, to 610 gallons per minute after last week's release.

The company that previously owned the Gold King, Colorado Goldfields Incorporated (which Hennis was also involved with), knew about the increased drainage as early as 2000, and warned of a "blow-out" in a 2008 Securities and Exchange Commission filing. Still, the Goldfields was never able to prove where the water was coming from.

"[The concrete plugs impound] billions and billions of gallons of water," said Hennis. "If those bulkheads were to rupture for any reason, instead of having one day of water flowing past Durango that's blood orange, we would have months and months."

Kinross Gold Corporation, which owns Sunnyside, would not make anyone available to comment for this story. In a prepared statement, the company wrote: "Since Sunnyside's closure in 1991, the company has met all its regulatory environmental requirements and has complied with all the terms of its reclamation permit."

Asked about the bulkheads, EPA regional emergency response director David Ostrander told reporters on Friday: "We don't really know what the effect has been."

“The conditions up there are very complex,” Ostrander said. The EPA refused to comment on connections between mines at the site, or the possibility that more water is backed up behind other mines in the area on Saturday, saying Ostrander was not on the call and thus could not comment.

“There’s extensive mining workings underground. The connections between various mines from a water standpoint is not well understood at this point and so we don’t really know if we can say water is coming from here or there,” he said.

Other experts echoed Ostrander’s statements.

“You have 100 years of underground mine workings, mine space, with an unknown amount of water coming in. You have – you don’t even know all the mine workings because it’s not all documented,” said Ron Cohen a civil and environmental engineer with the Colorado School of Mines. “You can’t send anybody down there – you only can go so far before it becomes too risky.”

Bill Simon, coordinator of Animas River Stakeholders Group (ARSG), a cooperation between community members and local businesses including Sunnyside and other mining companies that has resisted superfund designation of the Gold King, agreed about the possibility of flowing contamination. But he said it’s impossible to say how much water is behind Gold King without going into the mine.

“It is possible,” said Simon. “You just don’t know until you go in.”

A history of accidents

New Mexico

Mike Wright and Mike Carruthers clear away debris from the Stacey Ditch in Aztec, New

Mexico. Federal officials say initial tests on sediments collected downstream of a mine waste spill show no risk to people using Colorado's Animas river. Photograph: Jon Austria/AP

Local officials reopened the Animas river to recreation on Friday, warning residents to bathe and wash clothes after coming into contact with the water, and not to drink it untreated. On Saturday, irrigation ditches were being flushed of orange sediment. The EPA is delivering 100,000 gallons of water per day to farmers in the Navajo Nation alone.

Data released by the EPA found the river reaching "pre-incident" levels, but that may not be comforting to some: hundreds of gallons of acid mine drainage have seeped into the Animas from Cement Creek for decades. Cement Creek has not supported fish life for at least 100 years, according to some experts.

The chemical reactions caused by acidic water decrease as the water is diluted with more neutral water, such as when it flowed downstream into the Animas. The dilution normalizes pH, causing metals to fall out of the water column and into sediment, accounting for the relatively quick passage of the 3 million gallons of colored water.

Blow-outs are not uncommon in the Animas basin, said Simon. There have been five notable releases since he started the ARSG in 1994, and more decades earlier.

Mining accidents, apart from blow-outs, are not uncommon in the area. In one incident in 1974, miners accidentally dumped 100,000 tons of gray tailings into the Animas river, turning the river silver by some accounts and washing away part of a highway. In an incident in 1978, mining at Sunnyside weakened the bed of Lake Emma until the mine collapsed, the Durango Herald reported.

Far from being the only mine with such issues, Gold King is one of many, often with dams pre-dating environmental regulations that could be rotting away.

"This is not the only problem at these sites, in terms of these spills," said Cohen. A tailings spill, for example, could release "100 times the volume of the Gold King [spill]".

“Given that information, the longer we wait to deal with this problem, with the temporary measures that we do [have], the more these are going to occur,” said Cohen. “We’re looking at a not very promising future, so, in that, I’m an alarmist, based on my knowledge.”

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Huffington Post

http://www.huffingtonpost.com/steven-cohen/epa-spilled-but-didnt-dum_b_7997718.html

EPA Spilled, but Didn't Dump, the Toxics That Ended up in Colorado's River

Steven Cohen

August 17, 8:29AM EDT

Last week, while inspecting leaks from a long-abandoned Colorado gold mine, EPA and its contractors accidentally breached the wall of an old mine tunnel, releasing an orange-colored toxic waste soup that flowed first into Cement Creek and then into the Animas River. On August 11th, the Associated Press reported that:

The head of the Environmental Protection Agency said... her department takes full responsibility for spilling 3 million gallons of mining waste that turned a southwest Colorado river an unnatural shade of orange, adding it "pains me to no end."... State and local officials in the areas affected by the spill have characterized EPA's initial response as too slow and too small. It took about 24 hours to first notify some downstream communities of the accident and the agency originally underestimated the volume of the spill.

Senator James Inhofe, Chair of the Senate Environment and Public Works Committee, put down his climate change-denying snowball long enough to make sure that EPA knew it would be held accountable for the mistake. Sadly, EPA made a bad target for his wrath, since EPA Administrator Gina McCarthy had already accepted responsibility and was moving quickly to prevent similar accidents in the future.

The problem is that there are thousands of these abandoned mines throughout the west and many of them are filled with the toxic residue of the mining process. According to an Associated Press report on August 9th:

Experts estimate there are 55,000 such abandoned mines from Colorado to Idaho to California, and federal and state authorities have struggled to clean them for decades. The federal government says 40 percent of the headwaters of Western waterways have been contaminated from mine runoff.

Most of the mines have been abandoned for many years. The mine that leaked toxics last week has not been active since 1923. Our past practice of ignoring the environmental impact of our economic activities continues to come back to haunt us--and the process of dealing with this poisonous legacy is far from over. The toxic waste cleanup Superfund program was enacted in 1980 following a study that estimated there were between 30,000 and 50,000 abandoned toxic waste sites in the United States. And that estimate did not include the 55,000 abandoned mines mentioned above.

Throughout the 20th century, we stored and dumped toxic materials wherever it was cheap to stash them. In some cases, such as mines, we simply closed them, walked away and ignored the toxic mine waste. In 1976 we enacted the Resource Conservation and Recovery Act to regulate hazardous waste and in 1980 we passed Superfund to clean up the toxics already in the ground. Between the private sector, the military and the rest of the government, we have already spent nearly half a trillion dollars over the past thirty years to clean up the old mess, and the work will continue for generations. While EPA should have been more careful in its work in Colorado, managing and cleaning up this toxic mess will inevitably cause additional surprises. Even if we do nothing, we can expect that natural processes will cause other old mine waste sites to leak and contaminate valuable environmental resources. It may be convenient to blame all this on EPA, but it is unfair to do so.

We need to develop the organizational capacity and technology required to investigate and remediate the toxic residue of our economic development. This will take resources. EPA in its current state does not inspire the confidence we need to invest resources in them to clean up this mess. Nevertheless, I see no practical alternative to our national environmental regulatory agency. This is a national problem requiring a national solution. Sadly, given Senator Inhofe's power and his intense mistrust of EPA, there is no chance that additional resources will be invested in EPA to address toxic cleanup.

Unlike the climate issue that Inhofe famously asserts does not exist, yellow and poisoned rivers are a bit harder to wish away. Blaming the problem on EPA's competence is more posturing than policy. First, EPA did not dump the toxic wastes; they were simply trying to prevent them from being released into the environment. If we want them to do a better job, they must be given the resources and the authority to do a better job. If the argument is that they should do a better job with the resources they have, then at a minimum, Congress should commission a non-partisan,

expert management analysis to see if it is really possible to "do more with less" in this instance.

My guess is that they will discover what is obvious: that EPA's mission is expanding while its resources are shrinking. EPA's staff size peaked in Fiscal Year 1999 at 18,110. By fiscal 2014 it had shrunk to 15,408. Its budget in fiscal year 2015 was about \$8.14 billion; a decline from \$8.2 billion the year before, and these are actual (not inflation-corrected) dollars. Meanwhile, the complexity, size and toxicity of our economy is growing. While I am not arguing for throwing money at the problem, the Tea Party strategy of "starving the government beast" has not enhanced the competence of that "beast". I have some sympathy for the view that the federal government has become a huge, unmanageable, bureaucratic nightmare. I find city and local governments more focused, task-oriented and better managed than the feds. But the toxics of concern here may be located in very small jurisdictions that are unlikely to possess the expertise needed to identify them and clean them up. Moreover, the migration of toxics does not end at the borderlines of our towns or states. All of this argues for a federal program, perhaps one that requires a partnership between federal and state governments. I see little hope of progress, however, without additional resources.

The central argument for sustainability management is that we do not preserve the environment because we love nature (although we might), but because we need it. Poisoned rivers are poor sources of drinking water. Here in America we continue our decades-long effort to clean up the legacy of our toxic past. While I wish we'd stopped generating this form of pollution, it is important to note that we have not yet ended some of the practices that got us into this mess. According to the National Wildlife Federation:

The hard rock mining industry is the single largest source of toxic waste and one of the most destructive industries in the country. Today's industrial-strength mining involves the blasting, excavating, and crushing of many thousands of acres of land and the use of huge quantities of toxic chemicals such as cyanide and sulfuric acid. The mines that produce our gold, silver, copper, and uranium are notorious for polluting adjacent streams, lakes, and groundwater with toxic by-products.

Moreover, outside the United States, in the developing world, we see the pattern being repeated. China, India, Latin America and Africa can provide countless examples of the same sloppy and mismanaged industrial practices that we practically invented here.

There is no escaping these costs. It is truly a case of "pay me now" or "pay me later." The short-term, expedient result of ignoring environmental impacts may be greater immediate profit for some, but the long-term impact is higher costs and lower profit, and many of those higher costs

must be borne by all of us. Many of the companies that made the mess will be long gone before many of the bills come due. Even when the impact of toxic pollution is immediate, some of the costs to society are hidden in our rising health care bills.

In the bad old days, some used to say that the solution to pollution is dilution. Given time, water and space, pollution will dissolve. Unfortunately, some of the chemicals we've unleashed are more persistent and dangerous than we thought. The answer is not to close down factories or end the use of these chemicals, but to more carefully manage their mining, use and disposal. Mining processes must be more closely regulated.

Finally, a national effort to identify, manage and possibly clean up mining waste is needed. EPA has some authority under Superfund (CERCLA), but a decade and a half ago opted for primarily a partnership approach through EPA's National Hardrock Mining Framework. Moreover, as Julie Turkewitz reports in yesterday's New York Times, the abandoned mine issue is the subject of local controversy in Colorado:

Some have argued that the mines should become a Superfund site... Others, fearful of the stigma that sometimes comes with Superfund status and leery of federal involvement in local issues, are opposed. The fault line in the debate often falls between newer arrivals, who tend to favor E.P.A. involvement, and longtime residents, who typically oppose it.

EPA's credibility was not helped by the mistakes they made last week, but the local approach is obviously insufficient. The old strategy of letting sleeping dogs lie won't work because this mine waste is not going to lie still.

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New York Times

http://www.nytimes.com/2015/08/17/us/animas-river-colorado-mine-spill-epa.html?_r=0

Colorado Spill Heightens Debate Over Future of Old Mines

Julie Turkewitz

August 16, 2015

SILVERTON, Colo. — When the mine here opened in the early 1890s amid a frenzy of frontier gold exploration, its founders gave it a lofty name: the Gold King, reflecting their great hopes for finding riches in its depths. Over the next decade, the Gold King went on to become one of the

most productive mines in Colorado's San Juan County, with three shifts of men working 24 hours a day in its dark corridors.

But the mine's prosperity proved short-lived. When the economy hit a recession in the early 1920s, its operators abandoned it, with open tunnels that filled with snowmelt and rainwater that eventually turned to acid, leaving behind a toxic legacy that this region has struggled to clean up for decades.

Then, on Aug. 5, the Gold King split open while a team contracted by the Environmental Protection Agency was investigating the source of a leak. The accident sent a yellow plume south into the Animas River and turned Western waterways into a mustard ribbon, causing three states and the Navajo Nation to declare states of emergency.

The accident heightened a debate here over the future of this region's old mines, and served as a reminder, some critics say, that the Gold King's toxic demise could be repeated at any of thousands of abandoned mines around the country.

"Our initial economy was largely driven by mining," Gov. John Hickenlooper said in an interview last week at the State Capitol, a building with a gold-leaf dome that pays homage to this history. "But it left us a sad legacy of these sites that are going to need significant resources to fix. Damage that no one understood or realized that this was going to be an issue."

Colorado "dodged a bullet" this month, he added, saying the effects of the spill could have been far worse had the mine been larger or more laden with metals.

In its heyday, the Gold King produced about 350,000 ounces of high-grade gold, according to its current owner, and its products landed on the fingers of well-off women in New York City, in the pockets of everyday Americans and in the vaults of banks around the world.

After the Gold King shut down, it passed from company to company, with owners who each believed that it would one day be economically feasible to reopen the mine and extract more of the gold and other minerals buried there.

In 1999, Steve Fearn, an engineer, acquired the mine. In 2005, when Mr. Fearn could no longer pay the mortgage, a businessman named Todd Hennis bought it at foreclosure for \$290,000. Mr. Hennis says the financial deal makes him immune to federal laws that would typically hold him accountable for wastewater spilling from his mine.

Mr. Hennis, who lives in a Denver suburb, said the mine could contain 400,000 ounces of gold and four million ounces of silver, and he hopes to turn a profit by selling.

But by 2011 the Gold King was spitting out metal-laced waste at an average rate of 176 gallons per minute, according to E.P.A. data, and it was just one of several leaky mines in San Juan County with a discharge rate that residents, local officials and experts call alarming.

In the creek below the mines, tests showed that the water had levels of cadmium and copper more than 10 times the maximum federal standard for a waterway that sustains aquatic life, and the level of zinc was more than 40 times that federal standard.

“In highly technical terms,” said Ronald Cohen, a professor at the Colorado School of Mines, “I would say it’s really ugly.”

Today, there are two communities directly below the Gold King: Silverton, a town of 655 people that consists mostly of lifelong residents whose families came here generations ago to work in the mines, and Durango, a city of 17,000 that sits 50 miles to the south and is full of retirees and young people attracted by the spectacular hiking, biking and rafting nearby.

The Animas River — the waterway affected by the mine spill and by the daily leakage of toxic waste — is deeply entrenched in the culture and economy of both places, used for fishing, rafting, irrigation, livestock and, in the case of Durango, drinking. But for years, the subject of mine cleanup has divided these communities.

Some have argued that the mines should become a Superfund site, a federal designation that could allow the E.P.A. to build a wastewater treatment plant at an estimated cost of \$5 million.

Others, fearful of the stigma that sometimes comes with Superfund status and leery of federal involvement in local issues, are opposed.

The fault line in the debate often falls between newer arrivals, who tend to favor E.P.A. involvement, and longtime residents, who typically oppose it. The last mine in the county closed in 1991, but some Silverton mining families hold on to hope that the mines will reopen, something that would almost surely not happen if the region became a Superfund site.

In Silverton over the weekend, residents said the E.P.A.'s accident had heightened the disagreement.

On Saturday, at a spot on a dirt road just across from the Gold King, one of the mine's former owners — Mr. Fearn, a longtime Silverton resident and engineer who is 71 — gazed out at the flow from the mine, which was still running at 600 gallons a minute, more than three times its typical rate.

He explained that a coalition of mine owners, environmental groups, government entities and residents calling itself the Animas River Stakeholders Group had been working together since 1994 to clean up these mines.

Even after the spill, he said, he favors a voluntary collaboration, rather than a federal takeover. "It's our community," he said. "We'd like to have a bit of a say in how it's done."

After he spoke, a turquoise Jeep Cherokee pulled up, and Bill Dodge, a transplant from a Washington suburb who lives part time in Silverton, jumped out wearing a blue fly-fishing hat.

He had heard about the accident and wanted to see the damage for himself. He was tired of the

slow-moving stakeholders meetings, he said, with anti-Superfund residents “who scream and yell and complain and don’t cooperate.”

“We need a treatment plant now,” said Mr. Dodge, 74. “I think this is the sort of incident that can provoke a change in attitude.”

Reuters

<http://www.reuters.com/article/2015/08/16/usa-colorado-spill-idUSL1N10R03820150816>

New Mexico rivers polluted by mine waste reopen for drinking water intakes, recreation

Laura Zuckerman

August 16, 1:39 AM EDT

Aug 15 Stretches of two rivers in New Mexico contaminated by toxic waste earlier this month from an abandoned gold mine were reopened late Saturday to cities whose public drinking water systems are supplied by the rivers' surface waters, state officials said.

Sections of the Animas and San Juan rivers also were re-opened for boating and fishing for the first time since being polluted by a spill of more than 3 million gallons of waste from the derelict Gold King Mine near Silverton, Colorado, New Mexico Environment Department spokeswoman Allison Scott Majure said.

A U.S. Environmental Protection Agency crew inadvertently caused the Aug. 5 release that ultimately fouled the Animas River, which flows southwest through Colorado to New Mexico, where it joins the San Juan River.

The reopening of the stretches in New Mexico came one day after Colorado officials approved the resumption of kayaking and rafting on a section of the Animas that turned bright orange from the spill, which contained such heavy metals as arsenic and lead.

New Mexico officials said testing found the waters met state and federal standards considered safe for drinking and recreation, Majure said.

Public water systems for the cities of Farmington and Aztec, with populations of 47,000 and 6,800 respectively, draw from the Animas and five smaller water supplies rely on the San Juan for water which is treated for drinking, she said.

On Wednesday, Colorado officials cleared the way for Durango, about 50 miles south of the spill's point of origin into a tributary of the Animas, to reopen its drinking water intakes from the river.

Recreational users of the Animas and San Juan may notice discoloration in sediment along the river banks, but the New Mexico environment and health departments believe the waterways are safe for boating and fishing. But long-term monitoring will determine the effects on the aquatic environment, said Majure.

New Mexico is recommending anglers release their catch rather, as the state Game and Fish Department is still trying to determine contamination levels in fish, she said. (Reporting by Laura Zuckerman, editing by Chris Michaud and Nick Macfie)

The Wall Street Journal

<http://www.wsj.com/articles/utah-new-mexico-say-san-juan-river-water-is-safe-to-drink-1439764676>

Rivers in Utah, New Mexico Reopened After Mine Spill

Kris Hudson

August 16, 7:22PM ET

The Animas and San Juan rivers, polluted by a leak from a Colorado gold mine Aug. 5, have been reopened for public use.

The New Mexico Environment Department on Saturday lifted its bans on using the rivers for drinking water and recreational activities. The Utah Department of Agriculture and Food on Friday removed advisories against using the San Juan for crop irrigation and livestock watering.

Officials in Colorado's La Plata County reopened the Animas to recreational use Friday after testing by the state's Department of Public Health and Environment found it safe.

The rivers had been off limits for most uses since an Environmental Protection Agency cleanup crew accidentally triggered a breach in the abandoned Gold King Mine near Durango, Colo., sending an estimated three million gallons of sludge into the rivers.

The contaminants, which temporarily gave the rivers a deep mustard hue, included elements such as lead and arsenic. EPA Administrator Gina McCarthy has apologized for the spill and promised a review of EPA procedures.

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